



# Healthcare mobility solutions — increase productivity of task-based facility, transport and biomedical workers with the CA50



The CA50 provides the two-way communication link needed for effective tracking of patient transport. As soon as personnel pick up or deliver a patient, confirmation of completion of the task can be sent on-the-spot, and the next task immediately delegated. Dispatch, nursing and surgical teams know a patient's location in real time — and the improved management allows the existing staff to transport more patients throughout the day. And the ability to scan the bar code on a patient's wristband further automates processes and reduces the chance of patient identification errors.

## Challenges facing today's healthcare provider

Today's healthcare providers face constant budget pressures due to changing regulatory requirements, growth of planned care and decreases in fee-for-service and insurance reimbursements. With limited opportunity to increase revenue, providers are focusing on measures that improve productivity to help control costs and enable the continued delivery of quality care.

By nature, the hospital is a highly mobile environment — employees are constantly moving between floors and units to address critical issues or routine tasks. Many healthcare providers have already implemented mobility solutions to eliminate errors and increase productivity in medication administration, specimen collection and other bedside applications. While these applications have yielded significant benefits, providers can realize additional operational improvements by extending these technologies to other mobile workgroups within the healthcare enterprise — custodial and maintenance personnel, transport staff and biomedical technicians.

Management of these highly mobile workers is often less-than-optimal. To delegate a single task to a maintenance worker, a supervisor must first locate the employee. And once the task has been delegated, there is often no visibility into task status.

Managing and scheduling employees involved in transporting patients throughout the hospital presents another challenge for healthcare providers. In the hospital, patients are constantly moving throughout surgical, nursing, therapy and examination services — typically with limited inter-departmental communication and fragmented accountability. Lack of communication can result in delayed patient delivery and an inefficient use of costly surgical and other resources.

Hospitals have relied on a combination of overhead paging systems and personal pagers to push tasks and keep employees connected. However, overhead paging systems do not offer the level of discretion needed for some messages and can disrupt the healthcare environment. Personal pagers carry an inherent communication delay. Pagers also incur costly monthly service and usage fees and offer only one way communication — there is no way for the employee to easily respond back with acknowledgement that a task was completed. In addition, in-building issues can seriously disrupt communication with these mobile workers — pages sent while an employee is out of coverage cannot be received, and unlike voicemail messages, are not stored for later delivery by the

## Key Benefits:

Increases productivity for task-based healthcare workers

Improves visibility into patient flow

Reduces reporting burden for JCAHO compliance

Ensures that mobile workers are instantly available and accessible when needed

Low total cost of ownership



With the CA50's walkie-talkie style communications, nurses can quickly reach custodial staff for an emergency cleanup — and a text message can be returned to the nurse to verify that the task is complete.

And senders do not receive a message that a page was not delivered.

And lastly, healthcare providers are also burdened by the extensive documentation requirements to meet JCAHO, FDA, ECRI and other regulations. Whether it's related to medical equipment maintenance or facility maintenance, JCAHO requires thorough documentation — including maintenance procedures, schedules and a history of maintenance activities. In the demanding and dynamic healthcare environment, creating complete documentation to meet these requirements can be a challenge. And as the JCAHO begins its unannounced surveys, hospitals need tools that can ensure consistent and complete reporting after every inspection or maintenance activity.

#### **CA50 voice and data appliance — new class of mobile device for the task-based worker**

The CA50 defines a new product category, improving productivity and streamlining documentation for task-based healthcare workers by delivering bar code scanning, text messaging receipt and cost-effective voice calling via voice over IP (VoIP) as well as the right set of data applications. With its cost-effective price, the CA50 enables enterprises to extend these productivity-enhancing features to all task-based employees, including maintenance and transport personnel, instead of a select few. The pocket-sized device can be comfortably carried all day long — providing instant access to personnel via either voice or text-based messaging wherever they may be.

Capabilities include:

- One-to-one voice calls between workers over the wireless LAN (VoIP)
- Walkie-talkie style communications that enable supervisors to broadcast information to any defined employee group
- Bar code scanning for process automation and enhanced accuracy when identifying medical equipment, patients and more
- Text message receipt for efficient and effective task management
- Lightweight data applications, including confirmation of task completion, to create a thorough audit trail of all work performed

#### **Get the right patient to the right place at the right time with improved visibility into patient movement**

Equipping transport personnel with a CA50 streamlines the execution and monitoring of patient dispatch orders — improving visibility into patient and personnel location as they move between surgical, nursing, therapy and examination areas. As a result, hospitals can make more effective use of transport resources — resulting in improved patient care and satisfaction, lowered employee stress and higher patient throughput.

The CA50 offers real-time communication between personnel through voice and specialized data applications. Dispatch or nursing staff can instantly broadcast transport requests to all transport staff or to a specific employee for faster, more efficient patient pick-ups. And the CA50 provides a two-way communication link needed for effectively tracking transport and patient status. As soon as personnel pick up or deliver a patient, confirmation of completion of the task can be sent on-the-spot and the next task immediately delegated. Dispatch, nursing and surgical teams know a patient's location in real time — and the improved management allows the existing staff to transport more patients throughout the day. The ability to scan the bar code on a patient's wristband further automates processes and reduces the chance of patient identification errors.

The CA50 can also help hospitals improve efficiency in operating rooms. According to the 2005 Health Care Financial Management Association Report, operating rooms are a hospital's largest cost center, estimated to account for more than 40 percent of a hospital's total revenue and a similar proportion of total expenses. And according to the Clinical Advisory Board, studies indicate that operating room efficiency metrics — including on-time starts, utilization and overtime — are well below achievable targets at many hospitals. The real-time communication capabilities of the CA50 can help ensure that patients are delivered promptly to operating rooms — enabling surgical procedures to start on time and improving utilization of operating room time as well as surgical staff.

#### **Improve accuracy, productivity and reporting for equipment maintenance programs**

The CA50 incorporates bar code scanning and data capabilities to streamline equipment maintenance — and ensure proper documentation of each

maintenance activity. For critical medical devices — including defibrillators, infusion pumps, cardiac monitors, ventilators and medical imaging devices — regular calibration and proper maintenance ensure equipment will perform as expected in the critical patient care environment. Performing routine operational checks, calibration and servicing per manufacturer's instructions is vital to patients' health and safety, as well as absolutely crucial in meeting JCAHO regulations and reducing legal liability.

The CA50 enables biomedical technicians to complete their inspections and maintenance work quickly and easily. They can receive work instructions directly on the CA50, and use its in-building voice capabilities to place a call to determine the location of the particular unit that requires servicing. The CA50 eliminates any potential confusion as to which maintenance steps are needed for which device. A quick scan of the equipment's bar code can return the specific actions required — technicians know whether to clean, calibrate, test or otherwise service a given device.

Technicians can send a "task complete" confirmation directly from the CA50 at the press of a button — without having to disrupt their workflow to complete and submit paper documentation. Electronic confirmation improves productivity and accuracy, as well as ensures proper and consistent recording of each maintenance activity to ensure compliance with the JCAHO's requirement for thorough maintenance documentation on all life support and non-life support medical equipment. With the CA50, healthcare organizations are sure to have a full history of maintenance activities for any given device — complete with date, technician name and maintenance performed.

#### **Improve the healthcare environment with a more efficient custodial workforce**

The CA50 solves the challenge of how to effectively manage the highly-mobile janitorial staff. With text messaging and walkie-talkie style communications, the CA50 provides a direct and efficient communication link between supervisors and these task-based employees, so custodial workers are never more than a second away — even when moving through the hospital.

Supervisors can easily push tasks to workers — from planned or preventive maintenance tasks such as emptying waste paper baskets and

sweeping floors to emergency tasks like removing debris from a clogged toilet and repairing the hinge on a fire barrier door. As a result, critical situations are addressed quickly and workers always have a task list on hand for optimal productivity. And with the CA50's one-to-one voice communications, workers can instantly request additional assistance, get clarification on task details or location, or notify management of an emergency situation.

Unlike one-way pagers, the CA50 enables task acknowledgement applications with its two-way messaging. As soon as a task is completed, workers can send a confirmation at the press of a button — giving management real-time visibility into task status and results. And by providing a log of tasks completed, the CA50 helps facilitate reporting and documentation needed for JCAHO compliance.

By streamlining task delegation and supervision, the CA50 enables facility managers to more effectively and efficiently manage janitorial resources — critical at a time when staff count is low and turnover rates are high. Efficient management can yield critical sanitation and maintenance improvements, even in the face of tighter budgets. And the CA50 can become an integral part of any organization's JCAHO program — helping to ensure ongoing compliance with key life safety and environment of care (EOC) standards.

#### **A great business value for healthcare providers — a rapid return on investment (ROI) and a low total cost of ownership (TCO)**

Improvements in productivity, patient care and documentation result in a rapid return on investment — workers can get more done in a day and managers can maximize hospital resources. In addition, the CA50 offers enterprise durability and ease of management to ensure a low cost of ownership. It's designed to withstand all day use in the hospital environment — a 4-foot/1.21 m drop rating, IP40 sealing and the ability to survive 500 consecutive drops in a tumble drum ensure maximum uptime and device reliability, even if the unit is dropped regularly throughout multiple shifts.

Compatibility with Motorola's Mobility Services Platform (MSP) further reduces TCO by significantly reducing the cost and complexity of mobile device management. With MSP, hospital IT staff can remotely and automatically provision all CA50 devices, including installation of the right set of applications

and the right security configurations. In addition, IT staff can easily update operating systems, firmware and applications as well as troubleshoot issues — all from a central web-based console.

**Depend on Enterprise Mobility Services to support your mobile device**

Even the most intelligent devices need a maintenance plan and a support strategy. That's why Motorola covers every aspect of the CA50 — to ensure you derive full value from your investment in our technology. To help you seamlessly integrate this unique voice and data solution into your environment, Motorola offers a full suite of services that span the entire solution lifecycle — from initial assessment, commissioning and rollout through ongoing training and support. Motorola's Advanced Services help to minimize potential integration issues and reduce implementation time, while

Motorola's Customer Services help to ensure your device operates at peak performance. Our flexible programs help to protect your product uptime, allowing you to reap the full benefits Enterprise Mobility brings to your business.

**A solution for today and tomorrow**

The CA50's open system design enables integration with your technology architectures today as well as tomorrow, including your PBX and wireless LAN. And you can easily add more devices to support new staff, ensuring that your investment can cost-effectively scale as your organization grows.

For more information about the Motorola CA50, please visit us on the web at [www.symbol.com/CA50](http://www.symbol.com/CA50), or access our global contact directory at [www.symbol.com/contact](http://www.symbol.com/contact)



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APPLICATION BRIEF: CA50: Healthcare